

Supplement data 1: One-way ANOVA and LSD multiple comparison for 6 traits between Xihui 18 and S1-S6

Grain length (mm):

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.165	8	0.521	112.797	0.000
Within Groups	0.231	50	0.005		
Total	4.396	58			

Multiple Comparisons							
	(I) VAR00001	(J) VAR00001	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	Xihui 18	S1	-0.42833*	0.04114	0.000	-0.511	-0.3457
		S2	0.06925	0.03448	0.056	0.01	0.1485
		S3	-0.00503	0.03508	0.887	-0.0755	0.0654
		S4	0.03367	0.04114	0.417	-0.049	0.1163
		S5	0.25742*	0.0378	0.000	0.1815	0.3333
		S6	0.36747*	0.04386	0.000	0.2794	0.4556
		D1	-0.33387*	0.04804	0.000	-0.4304	-0.2374
		D2	0.54043*	0.03669	0.000	0.4667	0.6141

Chalkiness degree (%):

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	278.326	8	34.791	5.837	0
Within Groups	530.518	89	5.961		
Total	808.844	97			

Multiple Comparisons							
	(I) VAR00001	(J) VAR00001	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	Xihui 18	S1	1.17193*	1.06676	0.045	-0.9477	3.2915
		S2	0.30758	1.09737	0.78	-1.8729	2.488
		S3	-1.07209	1.06676	0.318	-3.1917	1.0475
		S4	-1.42242	1.09737	0.198	-3.6029	0.758
		S5	-3.08742*	1.01914	0.003	-5.1124	-1.0624
		S6	-1.41659	1.01914	0.168	-3.4416	0.6084
		D1	0.71758	1.01914	0.483	-1.3074	2.7426
		D2	2.67937*	1.00021	0.009	0.692	4.6668

Panicle length (cm):

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	66.699	8	8.337	6.222	0
Within Groups	73.701	55	1.34		
Total	140.4	63			

Multiple Comparisons							
	(I) VAR00001	(J) VAR00001	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	Xihui 18	S1	1.53380*	0.64568	0.021	0.2398	2.8278
		S2	-0.2522	0.50197	0.617	-1.2582	0.7538
		S3	-0.48627	0.53188	0.365	-1.5522	0.5796
		S4	-0.5417	0.64568	0.405	-1.8357	0.7523
		S5	-0.39803	0.58337	0.498	-1.5671	0.7711
		S6	0.5715	0.69563	0.415	-0.8226	1.9656
		D1	1.63860*	0.77173	0.038	0.092	3.1852
		D2	1.40755*	0.56249	0.039	1.2803	3.5348

Grain width (mm):

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.65	8	0.206	44.329	0
Within Groups	0.237	51	0.005		
Total	1.887	59			

Multiple Comparisons							
	(I) VAR00001	(J) VAR00001	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	Xihui 18	S1	-0.095	0.04402	0.053	-0.1834	-0.0066
		S2	-0.0295	0.03366	0.385	-0.0971	0.0381
		S3	0.03533	0.03522	0.321	-0.0354	0.106
		S4	-0.47200*	0.0413	0	-0.5549	-0.3891
		S5	-0.39904*	0.03794	0	-0.4752	-0.3229
		S6	-0.08	0.04402	0.075	-0.1684	0.0084
		D1	-0.08557	0.04402	0.057	-0.174	0.0028
		D2	-0.03951	0.03794	0.303	-0.1157	0.0367

1000-grain weight (g):

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	150.101	8	18.763	14.036	0
Within Groups	69.511	52	1.337		
Total	219.612	60			

Multiple Comparisons							
	(I) VAR00003	(J) VAR00003	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	Xihui 18	S1	-1.93946	0.67699	0.058	-3.2479	-0.531
		S2	0.53437	0.54202	0.329	-0.5533	1.622
		S3	-0.43596	0.56977	0.448	-1.5793	0.7074
		S4	-3.64286*	0.67699	0	-5.0013	-2.2844
		S5	-2.67614*	0.618	0	-3.9163	-1.436
		S6	-1.22052	0.79784	0.132	-2.8215	0.3805
		D1	-0.74852	0.79784	0.11	-2.8995	0.3025
		D2	1.76377*	0.59838	0.006	0.523	2.9245

Ratio of Length to width:

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.825	8	0.228	46.828	0
Within Groups	0.239	49	0.005		
Total	2.064	57			

Multiple Comparisons							
	(I) VAR00003	(J) VAR00003	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	Xihui 18	S1	-0.03504	0.04415	0.431	-0.1238	0.0537
		S2	0.0559	0.03765	0.144	-0.0198	0.1316
		S3	-0.03367	0.03823	0.383	-0.1105	0.0432
		S4	0.43304*	0.04415	0	0.3443	0.5218
		S5	0.43879*	0.04087	0	0.3567	0.5209
		S6	0.19812*	0.04682	0	0.104	0.2922
		D1	-0.01351	0.04682	0.774	-0.1076	0.0806
		D2	0.21341*	0.04087	0	0.1313	0.2955

